

What is claimed is:

1. A contact lens for collecting an analyte of interest in a tear fluid, comprising: (1) surface charges present in a density sufficient to impart to the contact lens an increased adsorption of the analyte of interest; (2) a coating comprising a receptor which binds specifically the analyte of interest; (3) molecular imprints for the analyte of interest; or (4) a core material that is prepared from a composition containing a receptor which binds specifically the analyte of interest.
2. A contact lens of claim 1, wherein the contact lens has surface charges which are introduced by: (1) preparing the contact lens from a composition comprising a positively or negatively charged monomer or macromer; (2) altering the chemical nature of chemical groups on the surface of the contact lens; (3) applying an LbL coating composed of at least one layer of a polyionic material onto the contact lens; or (4) combinations of (1), (2) and (3).
3. A contact lens of claim 2, wherein the contact lens has surface charges which are introduced by applying an LbL coating composed of at least one layer of a polyionic material onto the contact lens.
4. A contact lens of claim 1, wherein the contact lens has a coating comprising a receptor which binds specifically the analyte of interest.
5. A contact lens of claim 4, wherein the receptor is selected from the group consisting of antibodies, lectins, hormone receptors, drug receptors, enzymes, aptamers, nucleic acids, nucleic acid analogs, and fragments thereof.
6. A contact lens of claim 1, wherein the contact lens has molecular imprints for the analyte of interest.
7. A contact lens of claim 1, wherein the contact lens has a core material that is prepared from a composition containing a receptor which binds specifically the analyte of interest.
8. A contact lens of claim 1, wherein the contact lens is a soft contact lens.
9. A contact lens of claim 8, wherein the soft contact lens is a daily disposable hydrogel lens.
10. A method for collecting an analyte of interest in a body fluid, comprising the steps of: providing a contact lens capable of binding the analyte of interest; wearing the contact lens on an eye of an individual for a period of time sufficient to absorb an amount of the analyte of interest; and removing the contact lens containing the amount of the analyte of interest from the eye.

11. A method of claim 10, wherein the contact lens comprises: (1) surface charges present in a density sufficient to impart to the contact lens an increased adsorption of the analyte of interest; (2) a coating comprising a receptor which binds specifically the analyte of interest; (3) molecular imprints for the analyte of interest; or (4) a core material that is prepared from a composition containing a receptor which binds specifically the analyte of interest.
12. A method for assaying an analyte of interest in a body fluid, comprising the steps of: providing a contact lens capable of binding the analyte of interest; wearing the contact lens on an eye of an individual for a period of time sufficient long to absorb an amount of the analyte of interest; removing the contact lens containing the amount of the analyte of interest from the eye; determining the presence or the amount of the analyte of interest.
13. A method of claim 12, wherein the contact lens comprises: (1) surface charges present in a density sufficient to impart to the contact lens an increased adsorption of the analyte of interest; (2) a coating comprising a receptor which binds specifically the analyte of interest; (3) molecular imprints for the analyte of interest; or (4) a core material that is prepared from a composition containing a receptor which binds specifically the analyte of interest.
14. A kit for collecting an analyte of interest in a body fluid, comprising: a contact lens capable of binding the analyte of interest in a tear fluid, wherein said contact lens has surface charges that can impart to the contact lens an increased adsorption of the analyte of interest, a coating comprising a receptor which can bind specifically the analyte of interest, molecular imprints for the analyte of interest, or a core material that is prepared from a composition containing a receptor which binds specifically the analyte of interest; and an instruction.
15. A kit of claim 14, wherein the contact lens has surface charges which are introduced by: (1) preparing the contact lens from a composition comprising a positively or negatively charged monomer or macromer; (2) altering the chemical nature of chemical groups on the surface of the contact lens; (3) applying an LbL coating composed of at least one layer of a polyionic material onto the contact lens; or (4) combinations of (1), (2) and (3).
16. A kit of claim 15, wherein the contact lens has surface charges which are introduced by applying an LbL coating composed of at least one layer of a polyionic material onto the contact lens.

17. A kit of claim 14, wherein the contact lens has a coating comprising a receptor which binds specifically the analyte of interest.
18. A kit of claim 17, wherein the receptor is selected from the group consisting of antibodies, lectins, hormone receptors, drug receptors, enzymes, aptamers, nucleic acids, nucleic acid analogs, and fragments thereof.
19. A kit of claim 14, wherein the contact lens has molecular imprints for the analyte of interest.
20. A kit of claim 14, wherein the contact lens has a core material that is prepared from a composition containing a receptor which binds specifically the analyte of interest.
21. A kit for assaying an analyte of interest in a body fluid, comprising: a contact lens capable of binding the analyte of interest, wherein said contact lens has surface charges that can impart to the contact lens an increased adsorption of the analyte of interest, a coating comprising a receptor which can bind specifically the analyte of interest, molecular imprints for the analyte of interest, or a core material that is prepared from a composition containing a receptor which binds specifically the analyte of interest; and a testing agent composition which specifically reacts or interacts with the analyte of interest to form a detectable signal.
22. A kit of claim 21, wherein the contact lens has surface charges which are introduced by: (1) preparing the contact lens from a composition comprising a positively or negatively charged monomer or macromer; (2) altering the chemical nature of chemical groups on the surface of the contact lens; (3) applying an LbL coating composed of at least one layer of a polyionic material onto the contact lens; or (4) combinations of (1), (2) and (3).
23. A kit of claim 22, wherein the contact lens has surface charges which are introduced by applying an LbL coating composed of at least one layer of a polyionic material onto the contact lens.
24. A kit of claim 21, wherein the contact lens has a coating comprising a receptor which binds specifically the analyte of interest.
25. A kit of claim 24, wherein the receptor is selected from the group consisting of antibodies, lectins, hormone receptors, drug receptors, enzymes, aptamers, nucleic acids, nucleic acid analogs, and fragments thereof.
26. A kit of claim 21, wherein the contact lens has molecular imprints for the analyte of interest.

27. A kit of claim 21, wherein the contact lens has a core material that is prepared from a composition containing a receptor which binds specifically the analyte of interest.
28. A contact lens of claim 21, wherein the contact lens is a soft hydrogel contact lens.